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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/405,777	09/27/1999	JOHN G. WACLAWSKY	CIS99-1717	9859

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EXAMINER

ODLAND, DAVID E

ART UNIT	PAPER NUMBER
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2662

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DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/405,777

Applicant(s)

WACLAWSKY ET AL.

Examiner

David Odland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The following is a response to the amendments filed on 11/03/2003.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4,7-13,16-20,22-29 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Baugher (USPN 6,101,549), hereafter referred to as Baugher.

Referring to claims 1,10 and 19, Baugher discloses a data communications device comprising multiple network ports (a router comprising multiple data ports (see figure and 3)), memory that stores an application (the router comprises RAM (see column 2 lines 45-53)) and a controller coupled to the multiple network ports and the memory (the router has a CPU for executing instructions (see column 2 lines 45-53)), an agent process running on the controller when the controller operates in accordance with the application stored in the memory (the router runs a proxy reservation program (see abstract and column 2 lines 45-53)) such that the agent intercepts a request signal transmitted from a request signal source to a host computer having a corresponding host destination address, the request signal including the host destination address of the host computer (the proxy handler intercepts messages from the router that are destined and

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addressed for a receiving host (see abstract and column 4 lines 27-40 and figures 3 and 4A)), the request signal originally destined for receipt by the a host computer that would respond with control information for controlling a manner in which the request signal source transfers a data stream (the request is a PATH message that would normally be send to the receiving host that would otherwise respond with the RESV control message but instead the proxy handler responds with the RESV control message (see abstract and column 4 lines 27-40 and figures 3 and 4A)), generates a control signal in response to receiving the request signal (the proxy handler generates the RESV control message (see abstract and column 4 lines 27-40 and figures 3 and 4A)), the control signal including the control information for controlling the manner in which the request signal source transfers the data stream (the RESV message tells the router how much bandwidth to reserve for the RSVP communication (see abstract and column 4 lines 27-40 and figures 3 and 4A)) and provides the control signal to the request signal source to individually control the manner in which the request signal source transfers the data stream among multiple data streams transferred by the request signal source (the RESV control message is used by the router to reserve the proper resources (see abstract and column 4 lines 27-40 and figures 3 and 4A))).

Referring to claims 2,11 and 20, Baugher discloses the system discussed above.

Furthermore, Baugher discloses that the request signal source is a routing mechanism operating within a data communications device (the source is the router (see figure 3 and 4a)).

Referring to claims 3 and 12, Baugher discloses the system discussed above.

Furthermore, Baugher discloses the step of generating the control signal includes the steps of forming the control signal without communicating with the host computer in response to request signal.

Referring to claims 4 and 13, Baugher discloses the system discussed above. Furthermore, Baugher discloses that the data stream is a ReSerVation Protocol session, and wherein the control information of the control signal includes ReSerVation Protocol instructions (the messages are RSVP messages (see column 1 lines 10-23)).

Referring to claims 7 and 16, Baugher discloses the system discussed above. Furthermore, Baugher discloses that data within the data stream indicates that the host computer is an originator of the data stream (the resources that the router reserves is for data stream that will be transferred by the receiving host when it communicates with the sending host).

Referring to claims 8 and 17, Baugher discloses the system discussed above. Furthermore, Baugher discloses that data within the request signal indicates that the host computer is a destined recipient of the request signal (the messages are addressed to the receiving host (see abstract and column 4 lines 27-40 and figures 3 and 4A)).

Referring to claims 9 and 18, Baugher discloses the system discussed above. Furthermore, Baugher discloses that the request signal is an interprocess communication signal (the request is a PATH signal (see abstract and column 4 lines 27-40 and figures 3 and 4A)), and wherein the step of intercepting the request signal includes the step of obtaining, by a host agent operating within the data communications device and acting on behalf of the host computer, the request signal from the request signal source through an interprocess communication interface of the host agent (the proxy handler processing the PATH message request on behalf of the receiving host (see abstract and column 4 lines 27-40 and figures 3 and 4A)).

Referring to claims 22 and 24, Baugher discloses the system discussed above. Furthermore, Baugher discloses that the step of intercepting a request signal includes receiving

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the request signal from the request signal source, the request signal source being disposed at an intermediate node of the network, the request signal source routing the data stream from the host computer to a recipient computer (the request signal source is from a router which is an intermediate node and is used to route the data streams between the sending and receiving hosts (see abstract and column 4 lines 27-40 and figures 3 and 4A)).

Referring to claims 23, Baugher discloses the system discussed above. Furthermore, Baugher discloses the step of intercepting a request signal includes receiving the request signal at an intermediate node of the network other than a node of the request signal source (the PATH message originates at the sending host and thus it is intercepted also (see abstract and column 4 lines 27-40 and figures 3 and 4A)) .

Referring to claims 25 and 26 Baugher discloses the system discussed above. Furthermore, Baugher discloses the that the controller running the agent process is disposed at an intermediate node of the network other than that of the request signal source (the proxy handler can also be implemented with a separate proxy host (see figure 3)) and the request signal travels along a path from the request signal source to the controller exclusive of a path associated with the data stream (the PATH message from the router travels over a separate path to the proxy host when the system is used in this configuration (see figure 3 and 4A)).

Referring to claim 27, Baugher discloses a method for controlling transmission of a data stream through a network (a method of communication messages across a network (see abstract and column 4 lines 27-40 and figures 3 and 4A)), the method comprising at least partially supporting transmission of the data stream from a data stream source to a data stream recipient via a routing mechanism disposed at a network node between the data stream source and data

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stream recipient (the method supports sending messages from a sending host to a receiving host via a router (see abstract and column 4 lines 27-40 and item 58 of figure 3)), the routing mechanism supporting transmission of the data stream based, at least in part, on received control information (the router is used for transmitting and receiving data streams and does so based on PATH and RESV messages using the RSVP protocol (see abstract and column 4 lines 27-40 and figures 3 and 4A)), providing a software agent at the network node (the router comprises proxy and RSVP handlers (see figure 4A), via the software agent, intercepting a request signal transmitted from the routing mechanism to a remote host computer that, if the request signal was otherwise received by the remote host computer, would respond with control information for controlling a manner in which the routing mechanism transfers the data stream (the software on the router intercepts PATH messages that are being sent from the sending host to the receiving host, wherein the receiving host would normally respond to the sending host with a RESV message (see column 2 lines 45-53 and figure 3)), from the software agent intercepting the request signal generating a control signal in response to intercepting the request signal (the proxy software on the router is used to transmit the RESV message to the sending host on behalf of the receiving host (see abstract and column 4 lines 27-40 and figures 3 and 4A)), the control signal including the control information for controlling the manner in which the routing mechanism transfers the data stream (the RESV message is a RSVP message with the router uses to reserve the required bandwidth and resource for the data that the sending host wishes to transmit to the receiving host (see abstract and column 4 lines 27-40 and figures 3 and 4A)) and providing the control signal including control information to the routing mechanism to control a manner in which the routing mechanism transfers the data stream from the data stream source to data

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stream recipient (the RESV message tells the router how much resources to reserve for the data transfer (see abstract and column 4 lines 27-40 and figures 3 and 4A)).

Referring to claim 28 Baugher discloses the system discussed above. Furthermore, Baugher discloses that intercepting a request signal includes intercepting the request signal originally destined for receipt by the remote host computer, the remote host computer being the data stream recipient that receives the data stream (the PATH signal is originally destined for the receiving host, who is also to receive the data stream from the sending host (see abstract and column 4 lines 27-40 and figures 3 and 4A)).

Referring to claims 29 and 33 Baugher discloses the system discussed above. Furthermore, Baugher discloses that intercepting a request signal includes intercepting the request signal originally destined for receipt by the host computer (the PATH message is destined for the receiving host (see abstract and column 4 lines 27-40 and figures 3 and 4A)), the host computer being a data stream source that transmits the data stream (the receiving host will be the one communicating with the sending host once all the proper resources are reserved (see abstract and column 4 lines 27-40 and figures 3 and 4A)).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 5,6,14,15,30-32 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baugher.

Referring to claims 5 and 14, Baugher discloses the communications method as discussed above. Furthermore, Baugher discloses that the data stream is a multicast session (the signals can be of a multicast type (see column 4 lines 47-54)). Baugher does not disclose that the control information of the control signal includes Internet Group Management Protocol instructions. However, it would have been obvious to one skilled in the art at the time of the invention to have the control signal, in the system disclosed by Baugher, include Internet Group Management Protocol (IGMP) instructions because IGMP is an existing standardized communications protocol that uses multicast addressing to distinguish between sets or groups of recipients for multicast packets in a network and therefore it would be faster and more cost effective to implement rather than developing a new protocol for the multicasting performed Baugher.

Referring to claims 6 and 15, Baugher discloses the communications method as discussed above. Baugher does not disclose that the agent further performs an operation that decides whether to contact the host computer for assistance in response to the request signal, a result of the operation directing the data communications device not to contact the host computer in response to the request signal. However, it would have been obvious to one skilled in the art at the time of the invention to perform such an operation in the system of Baugher because avoiding the step of having to contact the receiving host would reduce network traffic and increase the available bandwidth, which can be used by other network nodes.

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Referring to claims 30-32 and 34-36, Baugher discloses the system discussed above. Baugher does not disclose the procedure of requesting for permission to drop packets, receiving the permission from the host to drop the packets or informing the host that the packets were dropped. However, Baugher utilizes the RSVP protocol, which is employed to require network elements to reserve bandwidth and other resources between transmitting and receiving nodes. Therefore, the recited procedure would be very beneficial in Baugher because if the routers are getting overly congested due to the fact they cannot use their resources for which they have reserved for the transmitting and receiving nodes, then the nodes can readjust there resource reservation requirements in order to relieve the congestion, thereby increasing the efficiency, fairness, quality and reliability of the Baugher system. For these reasons, it would have been obvious to one skilled in the art at the time of the invention to implement this procedure in the Baugher system.

Response to Arguments

6. Applicant's arguments with respect to claims 1-20 and 22-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

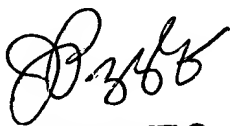
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Odland, who can be reached at (703) 305-3231 on Monday – Friday during the hours of 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached at (703) 305-4744. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, who can be reached at (703) 305-4750.

deo

January 22, 2004


JOHN PEZZLO
PRIMARY EXAMINER